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PUTNAM, David [US/US]; 17 Renwick Heights Road,  
Ithaca, NY 14850 (US).

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(74) Agent: LUCAS, John; TransForm Pharmaceuticals, Inc.,  
29 Hartwell Avenue, Lexington, MA 02421 (US).

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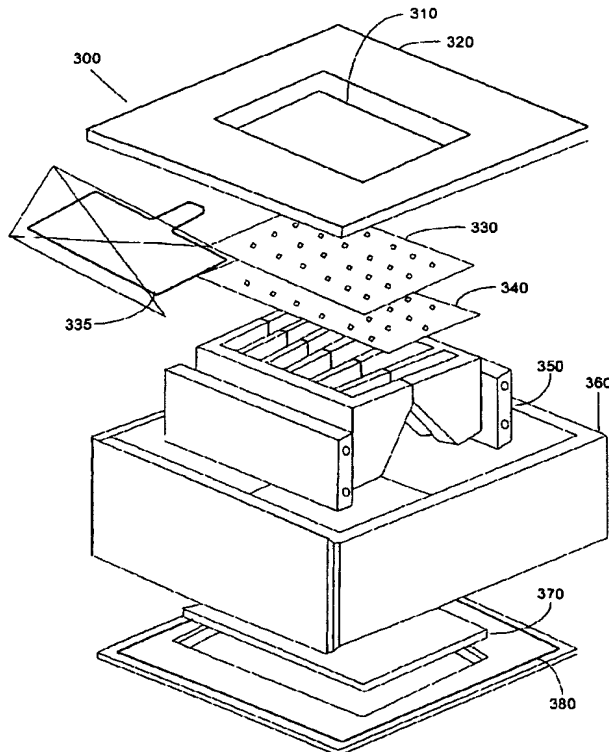
(71) Applicant (*for all designated States except US*): TRANS-  
FORM PHARMACEUTICALS, INC. [US/US]; 29  
Hartwell Avenue, Lexington, MA 02421 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): GYORY, J.,  
Richard [US/US]; 10 CURRY LANE, SUDBURY, MA  
01776 (US). GONZALEZ-ZUGASTI, Javier [AR/US];  
15 ANGIE ROAD, N. BILJERICA, MA 01862 (US).

[Continued on next page]

(54) Title: FREEZE-DRYING MICROSCOPE STAGE APPARATUS AND PROCESS OF USING THE SAME



(57) Abstract: The invention concerns methods, systems, and devices for screening arrays comprising hundreds, thousands, or hundreds of thousands of samples. These methods are useful to optimize, select, and discover compositions, or conditions for cost-effective freeze-drying of preparations and freezing of biologicals while maintaining structural integrity and/or viability. Such freeze-dried compositions are easily reformulated for treating or preventing diseases, the cause of the diseases, or the symptoms of the diseases. Moreover, optimized freezing of biological samples enables viable preservation of a wide variety of biologicals.

WO 2004/047753 A3



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## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,780,964 A (THOMPSON, SR.) 01 November 1988 (01.11.1988), whole document	1-57
A	US 5,367,786 A (JENNINGS) 29 November 1994 (29.11.1994), whole document.	1-57
A	US 5,428,905 A (BEUREL et al) 04 July 1995 (04.07.1995), whole document.	1-57
A	US 6,163,979 A (OETJEN et al) 26 December 2000 (26.12.2000), whole document.	1-57
A	US 5,824,485 A (THOMPSON et al) 20 October 1998 (20.10.1998), whole document.	1-57

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☐ See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
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Facsimile No. (703) 305-3230

Authorized Officer

Ira Lazarus

Telephone No. (703)308-1148